
SYSTEM AND METHOD FOR EFFICIENTLY WRITING DATA FROM AN IN-MEMORY DATABASE TO A DISK DATABASE

ABSTRACT OF THE INVENTION

A system and associated method write data from an in-memory database to a disk database in an efficient manner and with a relatively short lag time. The integration of data from in-memory to disk is achieved by limiting the operations of the in-memory database to insert only. The system shortens lag time by reducing the number of transactions required to transfer data from in-memory database to disk memory. The system compiles into an RDBMS, knowledge about the structure of the in-memory database, and then uses the end of the transaction callbacks from the RDBMS to keep the in-memory database and the disk memory in synch. The RDBMS includes a daemon that runs periodically to find records in the in-memory database that have not yet been written to the RDBMS, and then writes the found records to the RDBMS as part of a single transaction. If the transaction completes successfully, the in-memory database is updated to reflect which records have been "flushed" to the RDBMS. If the transaction fails, no action is taken. The present system synchronizes the in-memory database with the RDBMS.